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NOTES ON GEOGRAPHIC DISTRIBUTION

Diplodactylus tessellatus Gunther, 1875 (Squamata: Diplodactylidae), *Parasuta dwyeri* Greer, 2006 and *Suta suta* Peters, 1863 (Squamata: Elapidae): Distribution extension in the Murray catchment of New South Wales, South-eastern Australia

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ABSTRACT: We present new records of the Diplodactylid lizard *Diplodactylus tessellatus* and Elapid snakes *Parasuta dwyeri* and *Suta suta* for the Murray Catchment Management Area of New South Wales, south-eastern Australia. These records extend the distribution of these species by approximately 55 km and 45 km south-eastward (*D. tessellatus* and *S. suta* respectively) and 74 km north-westward (*P. dwyeri*).

We present range extensions for three terrestrial nocturnal squamate species observed during a third survey of monitoring sites established in early 2008 as part of a long-term biodiversity research program designed to procure baseline data on vertebrate fauna in the Murray Catchment Management Area of New South Wales (Figure 1) (Michael *et al.* 2010). Our field surveys involved inspecting arrays of artificial refuges (wooden railway sleepers, stacks of corrugated iron and roofing tiles) once each year. We identified species using the diagnostic features described in Michael and Lindenmayer (2010) and Wilson and Swan (2010). We did not collect voucher specimens.

Diplodactylus

The genus *Diplodactylus* comprises 17 small to moderate-sized terrestrial species with predominantly restricted geographical ranges associated with arid parts of Australia (Wilson and Swan 2010). *Diplodactylus tessellatus* is one of the few Diplodactylid lizards in the genus to cover a broad geographical area, encompassing habitats associated with deep cracking alluvial soils in the Northern Territory and the states of Queensland, New South Wales, South Australia and the northern plains of Victoria.

On the 23rd August 2010, we recorded an adult male *Diplodactylus tessellatus* sequestered within a bolt hole of a recycled railway sleeper near the township of Oaklands, New South Wales (35°37'57" S, 146°03'49" E, 129 m above sea level). The area being surveyed for reptiles was located in an isolated patch of remnant woodland vegetation (patch size = 5.6 ha) on heavy clay soils, with abundant amounts of fallen timber (191 logs / ha). The patch is surrounded by crops and exotic pasture, and experiences periods of seasonal inundation. The vegetation community is classified as transitional floodplain woodland dominated by *Eucalyptus microcarpa* (*sensu* Keith 2004). This record represents a south-eastward range extension of approximately 55 km from the nearest record south-east of Jerilderie (Figure 2).

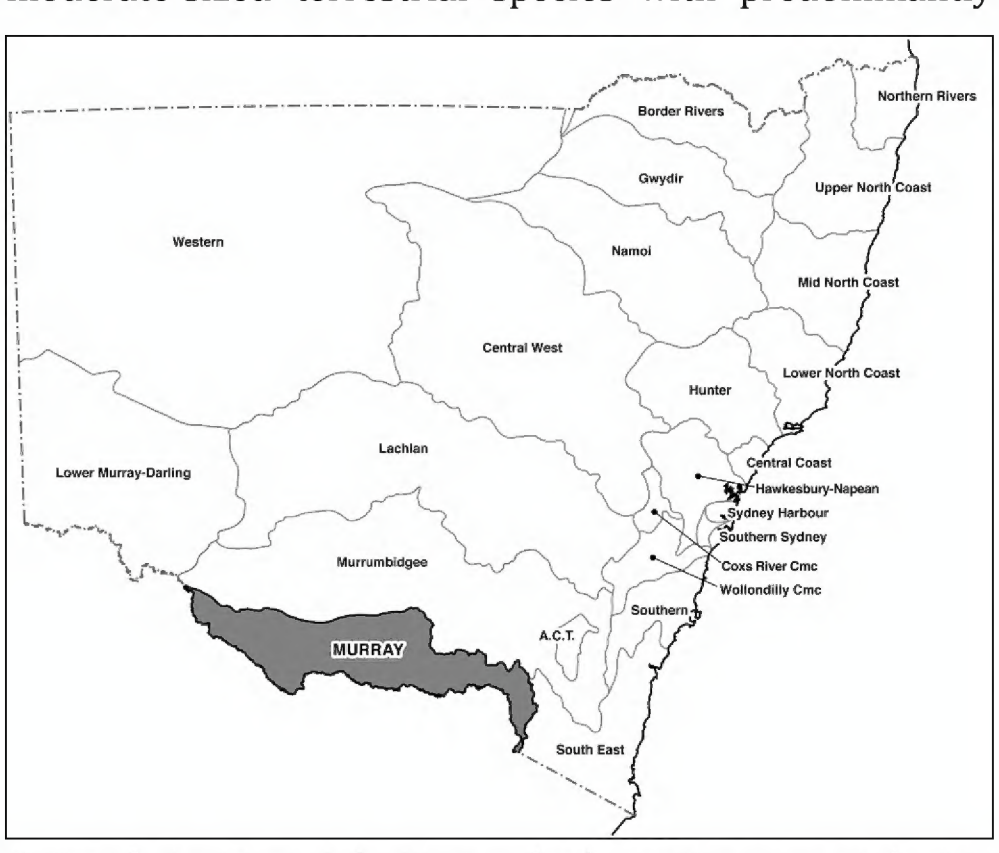

FIGURE 1. Location of the Murray Catchment Management Area in southern New South Wales, south-eastern Australia.

Parasuta

The genus *Parasuta* comprises six small terrestrial species with geographical ranges restricted to temperate and arid parts of south-eastern and south-western Australia (Wilson and Swan 2010). *Parasuta dwyeri* is associated with dry sclerophyll and woodland vegetation communities in eastern Australia (Wilson and Swan 2010), particularly in areas supporting rocky outcrops and surface rocks (Michael *et al.* 2011).

On the 24th August 2010, we recorded a pair of adult *P. dwyeri* beneath a stack of corrugated iron near the township of Conargo (35°19'50" S, 145°06'37" E, 99 m above sea level). The specimens were observed on a

vegetated sandhill (patch size = 58.6) on sandy soil, with low amounts of fallen timber (8 logs / ha) and surrounded by native pasture. The vegetation type is classified as riverine sandhill woodland dominated by *Callitris glaucophylla* (*sensu* Keith 2004). This record represents a range extension of approximately 74 km north-westward from the closest records located near Yarrawonga, and 96 km westward from a record near Urana (Figure 3).

Suta

The genus *Suta* comprises four medium-sized species with geographical ranges encompassing dry open habitats in all Australian mainland states (Wilson and Swan 2010). *Suta suta* is associated with deep cracking clay soils and heavy loams supporting grassland, shrubland and woodland vegetation communities in eastern Australia, extending as far south as the northern plains of Victoria, where it is listed as vulnerable (Wilson and Swan 2010).

On the 21st October 2010, we recorded three adult *Suta suta* in aggregation beneath a cluster of railway sleepers near the township of Oaklands (35°33'27" S, 146° 03'11" E, 121 m above sea level). The site where the animals were observed was a vegetated roadside corridor (patch size = 50 ha) on loamy clay soil, with limited amounts of fallen timber (16 logs / ha). The vegetation type is classified as transitional floodplain woodland dominated by *Eucalyptus microcarpa* (*sensu* Keith 2004). This record represents a south-eastward range extension of approximately 45 km from the closest records near Jerilderie and Finley (Figure 4).

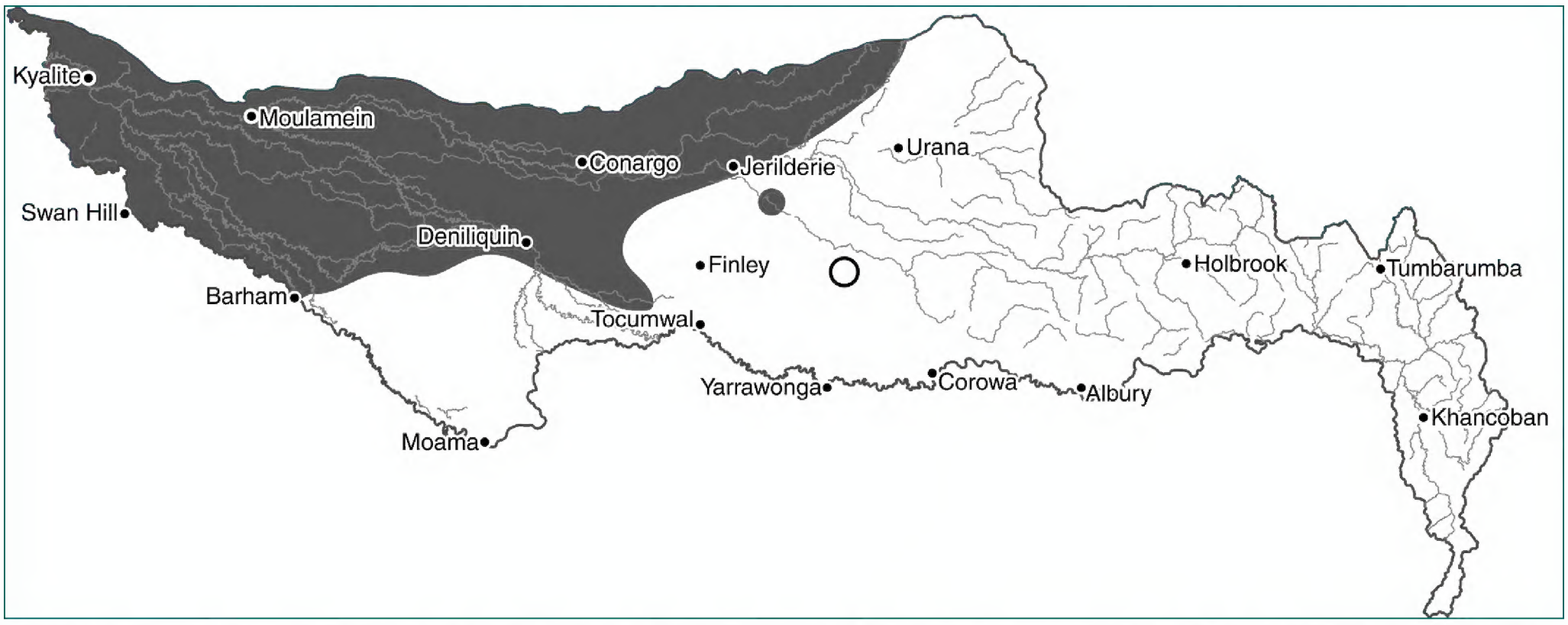

Figure 2. Geographical distribution of *Diplodactylus tessellatus* in the Murray Catchment Management Area of New South Wales, south-eastern Australia. Shaded area represents core geographical range (after Michael and Lindenmayer 2010), dots represent an isolated locality record and the open circle represents the new record.

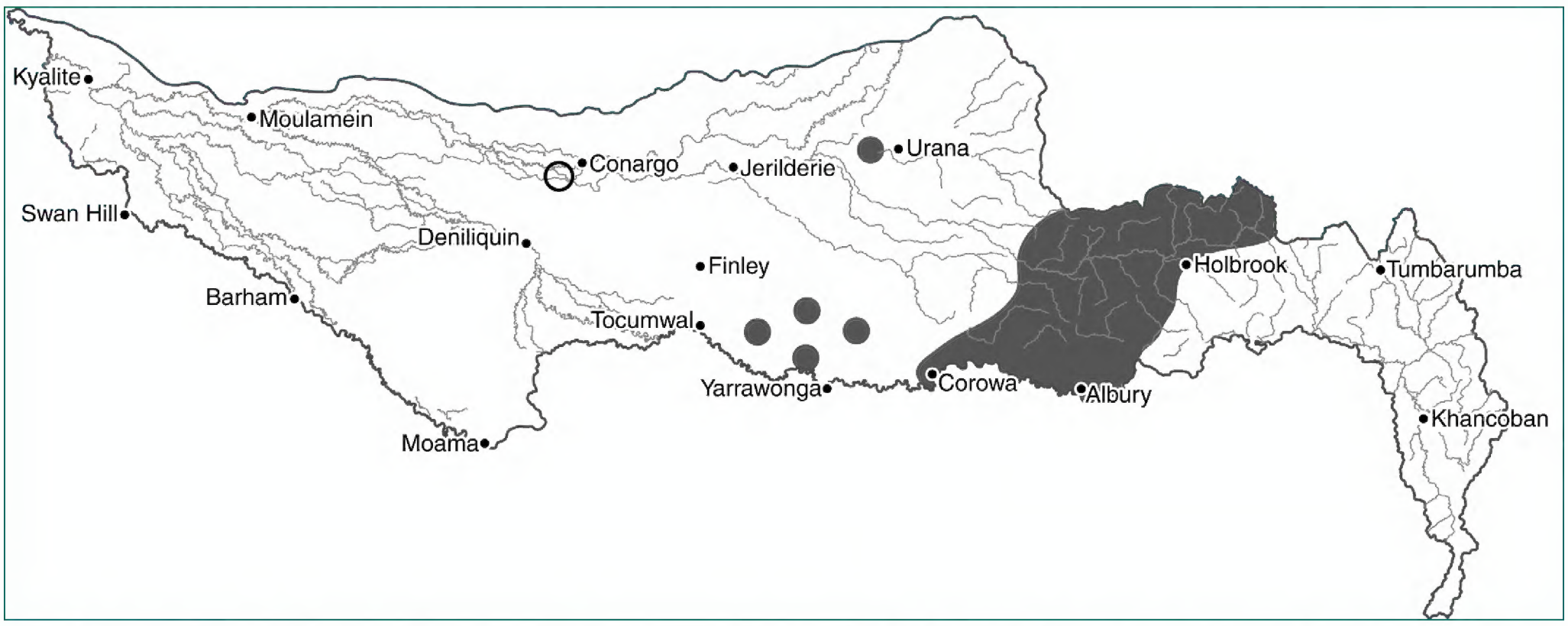

Figure 3. Geographical distribution of *Parasuta dwyeri* in the Murray Catchment Management Area of New South Wales, south-eastern Australia. Shaded area represents core geographical range (after Michael and Lindenmayer 2010), dots represent isolated locality records and the open circle represents the new record.

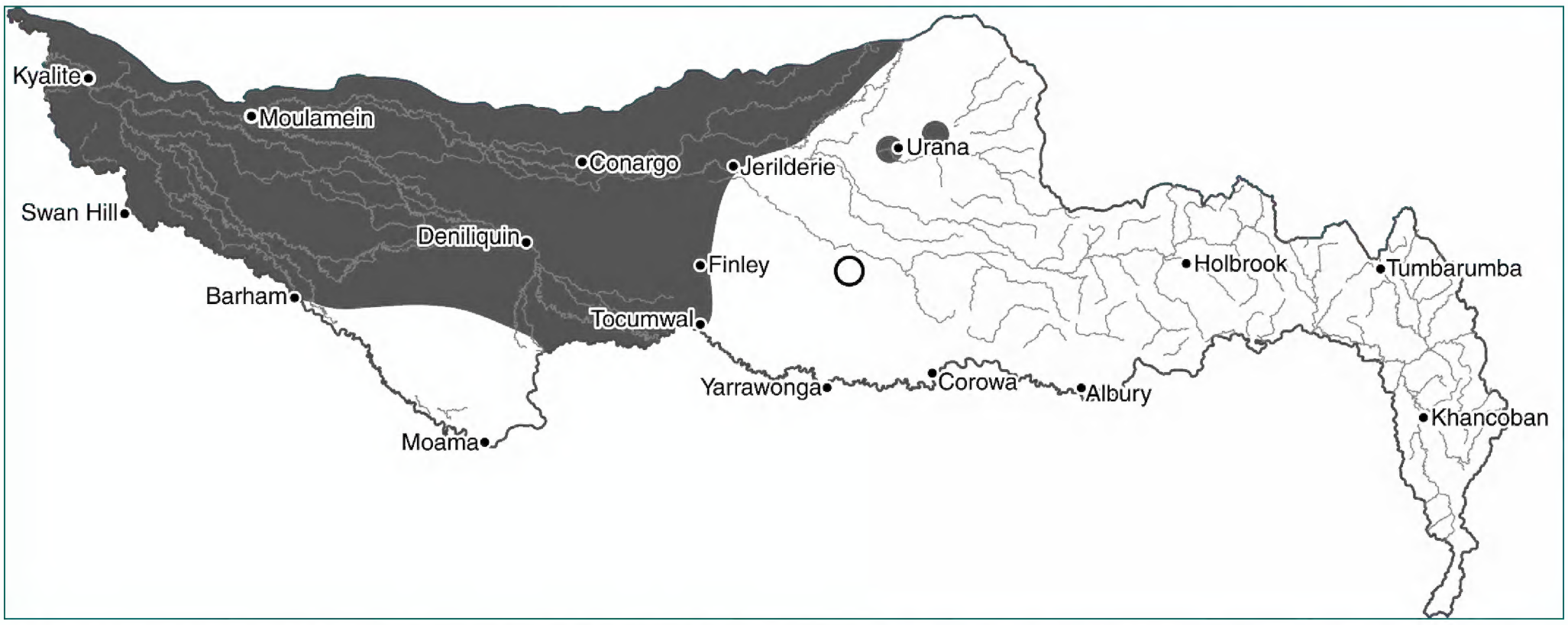

FIGURE 4. Geographical distribution of *Suta suta* in the Murray Catchment Management Area of New South Wales, south-eastern Australia. Shaded area represents core geographical range (after Michael and Lindenmayer 2010), dots represent isolated locality records and the open circle represents the new record.

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